

Printing ink for forming silver conductor circuit - comprises resin of (modified) alkyd, fatty acid base polyepoxy resin, urethanated oil, rosin and maleic oil, silver flake powder, organosilver cpd., flux and solvents etc.

Patent Assignee: TANAKA KIKINZOKU KOGYO KK

Patent Family

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JP 5311103	A	19931122	JP 92146554	A	19920512	199351	B

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Patent Details

Patent	Kind	Language	Page	Main IPC	Filing Notes
JP 5311103	A		5	C09D-011/02	

Abstract:

JP 5311103 A

The printing ink comprises (A) at least one resin component selected from alkyd, modified alkyd, fatty acid base epoxy resins, urethanted oil, resin and maleic oil; (B) Ag component, pref. 0.05-1.0 micron dia. spherical powder and/or 0.5-5 micron flaky powder and Ag contg. organic metal cpd., pref. Ag carboxylate, Ag acetylacetone or Ag alkoxide, and/or Ag contg. colloid; (C) flux component, pref. organic metal cpd. and/or glass frit and opt. (D) one or more than two components selected from solvent, leveling agent, polymerisation initiator, oxidn. promoter, anti-skinning agent, thickening agent, metal chelating resin, dispersant and filler. Forming Ag conductor circuits comprises (I) offset printing circuit patterns on a substrate using ink for forming Ag conductor circuits; opt. (I') pressing the printed circuit patterns to make their surfaces flat and smooth; (II) curing the printed patterns by as they are/or by irradiation of active energy radiation, pref. at least one selected from UV, IR and electron rays and/or by heating; (III) overprinting the cured circuit patterns as they are and/or by the same pattern; and (IV) calcining the printed patterns, pref. at a temp. above 300 deg. C is also new.

USE/ADVANTAGE - The printing ink for forming Ag conductor circuits and the method for forming Ag conductor circuits using the printing ink are suitable for forming Ag conductor circuits on various substrates which are used in various fields of the electronic industry. The obtd. printed Ag conductor circuits have good surface flatness due to good leveling properties, fine patterns having no defects e.g. wire breaking and reduced resistivity.

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Basic Patent (Number,Kind,Date): JP 7136194 A2 950530

PATENT FAMILY:

Japan (JP)

Patent (Number,Kind,Date): JP 7136194 A2 950530
DRAIN TRAP AID DEVICE (English)
Patent Assignee: MORITA TOKYO SEISAKUSHO KK
Author (Inventor): KADOMA SHIGEYUKI
Priority (Number,Kind,Date): JP 93311103 A 931118
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PATENT FAMILY:

Japan (JP)

Patent (Number,Kind,Date): JP 5311103 A2 931122
PRINTING INK FOR SILVER CONDUCTOR CIRCUIT AND METHOD FOR FORMING
SILVER CONDUCTOR CIRCUIT (English)
Patent Assignee: TANAKA PRECIOUS METAL IND
Author (Inventor): OKUDA AKIHIKO
Priority (Number,Kind,Date): JP 92146554 A 920512
Applic (Number,Kind,Date): JP 92146554 A 920512
IPC: * C09D-011/02; C09D-005/24; H05K-001/09; H05K-003/12
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Basic Patent (Number,Kind,Date): JP 54103738 A2 790815

PATENT FAMILY:

Japan (JP)

Patent (Number,Kind,Date): JP 54103738 A2 790815

PRESERVING OF VACUUM MOLDING CORE (English)

Patent Assignee: SINTOKOGIO LTD

Author (Inventor): TOMONAGA JIYUNICHI; SUGIURA HAJIME; MAKIGUCHI TADASHI

Priority (Number,Kind,Date): JP 7811103 A 780202

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Basic Patent (Number,Kind,Date): JP 53011103 A2 780201

PATENT FAMILY:**Japan (JP)**

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SLAG REMOVING METHOD (English)

Patent Assignee: KOBE STEEL LTD

Author (Inventor): HARAGUCHI TOSHIO; TAKAHATA SHINICHI; HIDAISHI TAIZOU;
NAKANO SHIGERU; SUGAWARA HIROFUMI

Priority (Number,Kind,Date): JP 7685529 A 760716

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IPC: * C22B-009/00; B22D-043/00; F27D-003/15

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PATENT FAMILY:**Japan (JP)**

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PEEPAAKATSUTAA (English)

Patent Assignee: COPAL CO LTD

Author (Inventor): HASEGAWA TSUNEE; SATO HIROYUKI

Priority (Number,Kind,Date): JP 7472141 A 740624

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